



# West Nile Virus Animal Fact Sheet

## **Q. What is West Nile Virus infection?**

A. It is an infection caused by West Nile Virus (WNV), which is spread by the bite of a mosquito infected with the virus. The disease can cause encephalitis (swelling of the brain), meningitis (swelling of the lining of the brain), or even death. The virus is named after the West Nile region of Uganda where the virus was first identified.

## **Q. Where did West Nile Virus come from?**

A. The virus was first identified in 1937 in Uganda, Africa. Prior to 1999, the virus had only been identified in Africa, Europe, the Middle East, and Asia. WNV was first detected in the United States in 1999.

## **Q. How is West Nile Virus transmitted?**

A. Infected mosquitoes are the primary transmission source of the virus. Mosquitoes draw the virus from infected birds and then transmit the virus to animals and humans through bites. WNV is not transmitted directly from person to person, from person to animal, from animal to person, or from animal to animal. There is no evidence that other insects or ticks transmit WNV in the United States.

## **Q. Has West Nile Virus caused severe illness or death in horses?**

A. Yes. Most horses infected with West Nile Virus recover, but WNV has caused deaths in horses in Kansas and in other parts of the United States.

## **Q. How does the virus cause severe illness or death in horses?**

A. Following transmission by an infected mosquito, West Nile Virus multiplies in the horse's blood system, crosses the blood brain barrier, and infects the brain. The virus interferes with normal central nervous system functioning and causes inflammation of the brain.

## **Q. Can a horse infected with West Nile Virus infect horses in neighboring stalls?**

A. No. There is no documented evidence that West Nile Virus is transmitted between horses. However, horses with suspected West Nile Virus should be isolated to prevent them from being bitten by mosquitoes, if at all possible.

## **Q. My horse is vaccinated against Eastern Equine Encephalitis (EEE), Western Equine Encephalitis (WEE), and Venezuelan Equine Encephalitis (VEE). Will these vaccines protect my horse against West Nile Virus infection?**

A. No. EEE, WEE, and VEE belong to another family of viruses for which there is no cross-protection.

**Q. Can I vaccinate my horse against West Nile Virus infection?**

A. Yes. WNV vaccine for horses is approved and available in Kansas, but its effectiveness is unknown. Consult your local veterinarian.

**Q. What is the treatment for a horse infected with West Nile Virus? Should it be destroyed?**

A. There is no reason to destroy a horse just because it has been infected with West Nile Virus. Most horses recover from the infection. Horses with severe signs may need intensive veterinary treatment.

**Q. Can West Nile Virus cause illness in dogs or cats?**

A. There have not been clinical signs associated with WNV in dogs or cats. Although they may be infected, they may not develop signs of disease. There is a published report of West Nile Virus isolated from a dog in southern Africa (Botswana) in 1982 and WNV has been isolated from several cats in 1999 and 2000. A study of dogs and cats in the New York City area showed a low infection rate.

**Q. Can infected dogs or cats be carriers (i.e., reservoirs) for West Nile Virus and transmit the virus to humans?**

A. No. Infectious mosquitoes transmit West Nile Virus. There is no evidence of transmission of WNV directly through dogs, cats or other animals.

**Q. Can a dog or cat infected with West Nile Virus infect other dogs or cats?**

A. No. There is no documented evidence that West Nile Virus is spread from animal to animal.

**Q. Do birds infected with West Nile Virus die or become ill?**

A. In the 1999 New York area epidemic, there was a large die-off of American crows. West Nile Virus has been identified in more than 110 species of birds found dead in the United States. The public identified most of these birds through reporting of dead birds.

**Q. Can you get West Nile Virus from birds?**

A. There is currently no evidence that West Nile Virus can be spread directly from an infected bird to people. However, dead birds can carry other diseases and should not be handled with bare hands. Use gloves to place dead birds into plastic bags and then placed into outdoor trash.

**Q. How can I report a dead bird(s) for testing in my area?**

A. The Kansas Department of Health and Environment (KDHE) is not collecting information on dead birds in 2005, as it has not shown to be a reliable indicator of where the virus is likely to affect humans.

**Q. What about chickens? Can domestic animals get West Nile Virus?**

A. All birds can get infected with West Nile Virus. Chickens may be more resistant than some other birds to dying from West Nile Virus.

**Q. Can I eat eggs or meat from West Nile Virus infected birds?**

A. There is no evidence that West Nile Virus is spread by eating eggs or meat from infected birds. However, any animal that appears sick should not be slaughtered for human consumption.

**Q. Are turkey and other wild game hunters in Kansas at risk for West Nile Virus infection?**

A. Because of their outdoor exposure, game hunters may be at risk if they are bitten by mosquitoes in areas with West Nile Virus activity. The extent to which West Nile Virus may be present in wild game is unknown. Surveillance studies are currently underway to answer this question.

**Q. What should wild game hunters do to protect against West Nile Virus infection?**

A. Hunters should follow the usual precautions when handling wild animals. If they anticipate being exposed to mosquitoes, they should apply insect repellents to clothing and skin, according to label instructions, to prevent mosquito bites.

**Q. Who should wild game hunters contact for information about the risk for West Nile Virus infection in specific areas in Kansas?**

A. Hunters should check with the Kansas Department of Wildlife and Parks in the area for information on local risks.

**Q. Is it safe to eat wild birds or game hunted in Kansas?**

A. There is no evidence that West Nile Virus can be transmitted from eating cooked meat. Animals that are obviously sick or are found dead should not be eaten.

**Q. What can be done to prevent an infection with West Nile Virus?**

A. Preventing mosquito bites will prevent West Nile Virus infection. Personal protection and reducing mosquito populations will minimize the chance of developing WNV infection when it is present in an area.

Personal protective measures to reduce or prevent mosquito bites include:

- Limiting time spent outdoors at dusk and dawn when mosquitoes are active
- Wearing long sleeve shirts and long pants when outdoors
- Using insect repellents containing DEET or picaridin when outdoors. Follow the manufacturer's directions carefully. Oil of lemon eucalyptus has also been shown to be as effective as repellants with low levels of DEET.
- Screening your home to prevent mosquito entry.

Reducing mosquito populations will also reduce mosquito bites. In some communities, public funded surveillance and control programs reduce mosquito populations by eliminating mosquito breeding habitat, mosquito larvae or adults. You can also take measures in your own yard or on your property to eliminate standing, stagnant water where mosquitoes breed. Mosquitoes most likely to carry WNV will not breed in fresh water or running water.

Mosquitoes most likely to carry WNV breed in standing, stagnant water. Any container or area where water can collect is a potential breeding ground for mosquitoes, including unused tires, buckets, toys, clogged gutters, birdbaths, and livestock tanks. Turning out the water in containers or replacing/replenishing existing water every three days will interrupt the mosquito life cycle. Also, the use of larvicides with Bti in these areas of stagnant, standing water has shown to be extremely effective in eliminating mosquitoes.

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**Q. Where can I obtain more information on West Nile Virus?**

A. You can visit the Kansas Department of Health and Environment (KDHE) Web site ([www.westnileks.com](http://www.westnileks.com)) for the latest information on West Nile Virus prevention and control activities in Kansas. You can also call your local health department or the KDHE West Nile Virus Hotline at 877-228-2287.